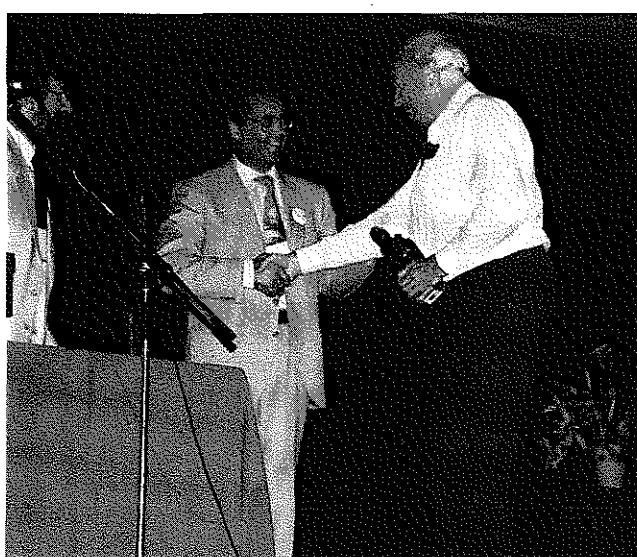


Congress on Mathematical Education in Québec with a two-page memo to the committee. In the first item of a list of matters likely to come up for discussion, he questioned whether the forthcoming congress ought to be modeled on the preceding two. David thought not, arguing that the attempt in earlier congresses to encourage face-to-face work and discussion in small groups had had the paradoxical effect of minimizing important differences and disagreements.

It was typical of David to begin by trying, as he said, "to initiate dialogue, not push a particular point of view". And it was also typical both to advance his own tentative, contrary view for the committee to think about and, in that view, to promote the idea of the congress becoming a place in which difference and disagreement would be honored. For David, professional meetings were not about broadcasting information; they thrived instead on contrast, disputation, thorough explication and sustained dialogue.

At the first meeting of the IPC, in Ilkley, England, in September 1989, the agenda questions began with the following: "Are there ways of improving the quality of presentations and the productivity of discussions [at the congress]?" Throughout that meeting, and in the meetings that followed, that question guided everything David did as he led the committee in designing and developing the program. Despite being waylaid by illness for several months early in 1990 and then retiring from Concordia University and moving to Vancouver later that year, David kept up a prolific correspondence as he juggled the many requests, delays and confusions that plague any IPC chair.

Just as Henry Pollak, IPC chair for ICME-4, had used his perch at Bell Labs to telephone around the world in putting the program together, David adopted the new medium of BITNET to extend his reach, meanwhile writing and sending countless letters via regular post. When the congress date finally arrived, in August 1992, David was given the usual expressions of gratitude. But only those who had worked with him on the IPC knew of the truly monumental effort he had made in bringing that congress program to a successful culmination.



(photo: Marty Hoffman)

Chairing the IPC for IMCE-7 was only one of David's host of accomplishments in advancing mathematics education both as an international community and as a field of scholarly study. His move to North America in the 1970s prompted two of his proudest accomplishments: the founding of the Canadian Mathematics Education Study Group and the launching of *For the Learning of Mathematics*.

In the early days of *FLM*, David often expressed to individual members of the Advisory Board his concerns about its viability. Reporting on a meeting of the journal's directors in August 1981, he wrote, "We need a *lot* more subscriptions, and we also need the time to accumulate them. I wonder if this will turn out to be my most spectacular error!" Responding to reassurances that the error would not have been his but ours, its readers and potential readers, he wrote:

I appreciate your remarks about *FLM* - though it could still prove to be my error of judgment in thinking that the "time was ripe" for it. I think that I have to suppose that the fact that my projections about costs and subscriptions have turned out wrong means that I got *something* wrong, fundamentally wrong in my assessment. The least culpable error may be in overestimating the audience for the kind of journal it is - in Gattegno's words, "I don't think there are 1,000 people who want to *reflect* about mathematics teaching".

If there are many more than a thousand such people now, it is in large measure due to the hard work and inspiring leadership of David Wheeler. He was himself a paradox: a deep thinker with the outlook of a mischievous boy. Who could forget his impatient snort when something especially stupid came his way? He was especially tough on researchers he thought should know better. I remember talking with him once as we sat outside a session on research he had found too much to take and realizing that this conversation we were having was far more enlightening and thought-provoking than any of the journal articles I'd recently read.

But no matter how impatient or discouraged he became, David's sunnier nature always came through. I think he would have agreed with Mark Twain:

Intellectual 'work' is misnamed; it is a pleasure, a dissipation, and is its own highest reward.

David Wheeler: Originalité, Simplicité et Humour Discret

COLETTE LABORDE

La création d'un journal bilingue, dans lequel on pouvait publier en français, est loin d'être passée inaperçue en France! L'apparition de *For the Learning of Mathematics* fut pour moi l'occasion de mieux connaître David Wheeler par ses écrits, remplis d'idées originales et teintés d'un humour discret.

David Wheeler était persuadé de l'importance du

développement d'une recherche fondamentale sur l'enseignement des mathématiques et cherchait à y contribuer activement de diverses manières. *For the Learning of Mathematics* est l'un des instruments qu'il avait créés au service de la recherche et qui continue de remplir son rôle de façon unique, suivant en cela l'esprit qu'il y avait insufflé originellement. David Wheeler avait en effet une vue large de la recherche sur l'enseignement des mathématiques et aimait à publier des articles allant jusqu'aux confins d'interrogations épistémologiques, linguistiques ou sociologiques. Il avait compris que la recherche vit de problèmes et que s'il est facile dans un domaine comme celui de l'enseignement mathématique d'exprimer des idées (tout un chacun a ses idées sur l'enseignement), il est difficile de formuler les vrais problèmes. Son appel à dresser une liste de ce que seraient les grands problèmes de recherche en éducation mathématique à la manière de Hilbert témoigne en conception exigeante de la recherche qu'il défendait.

Travaillant, il y a déjà bientôt vingt ans, sur les problèmes de langage dans l'enseignement des mathématiques, j'avais suivi avec attention ses travaux avec Lesley Lee sur le passage de l'arithmétique à l'algèbre (Lee and Wheeler, 1989). Il se trouvait que nous avions expérimenté de façon indépendante des problèmes communs, d'apparence arithmétique mais qui se résolvaient de façon efficace par l'algèbre. La similitude des observations que L. Lee et lui-même avaient pu faire auprès d'élèves canadiens et des miennes auprès d'élèves français était frappante (Laborde, 1990). Les formulations des élèves dans les deux pays faisaient appel au temps et à l'action faite par eux-mêmes (je multiplie, je divise, ...) Le point de vue algébrique élimine ses aspects et du coup la signification que les élèves attachent aux opérations effectuées. J'avais constaté avec surprise mais aussi non sans satisfaction, qu'allant au-delà des différences de curriculum, et de culture, la difficulté conceptuelle émergeait de façon quasi identique dans les deux pays. Identifier des régularités n'est pas sans créer de sentiment de plaisir intellectuel.

C'est en 1984 au congrès ICME à Adelaïde que je rencontrais pour la première fois David Wheeler alors qu'il était organisateur en chef du groupe de travail sur la recherche sur l'apprentissage et l'enseignement des mathématiques. Ce fut aussi le point de départ de contacts et d'échanges que nous avons entretenus pendant la dizaine d'années qui ont suivi, le plus souvent de façon épistolaire. Nous avons ainsi échangé plusieurs messages sur le titre de la conférence plénière qu'il m'avait invitée à tenir au congrès ICME à Québec en 1992. Il était le président du comité scientifique du congrès. Après que nous avions discuté et commenté les différentes possibilités dans plusieurs courriers, il avait accepté une dernière proposition de ma part, en ajoutant, sur le ton de la plaisanterie que c'était la dernière fois que ma raison l'emporterait sur la sienne!

Lors d'un séjour de six mois que j'effectuais à Montréal à l'université Concordia, j'ai pu habiter son appartement non loin de l'université, puisqu'il avait émigré vers des lieux moins froids l'hiver, et avait déménagé à Vancouver. Il m'envoyait alors des descriptions de son nouvel appartement inondé de soleil grâce à une immense baie vitrée et de la douceur climatique de Vancouver qu'il semblait apprécier

en comparaison aux rudes hivers montréalais.

Dans tous ses contacts, même institutionnels, David Wheeler savait s'engager sur le plan personnel avec simplicité, gentillesse et humour et c'est l'image que je garderai de lui.

Références

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A Piece for David Wheeler

ERIC LOVE

I want to remember the influence of David on a young teacher starting out in the 1960s. My earliest encounter with him was at my first Association of Teachers of Mathematics (A.T.M.) conference in 1966 at York. I already knew the name and some writings: he was on the list of authors of the first of the seminal A.T.M. jointly written books, *Some Lessons in Mathematics*, and I had read several of his pieces in the A.T.M. journal *Mathematics Teaching*. At the conference, he made contributions in several of the sessions I attended, and I was struck by his sharpness, which coupled with his size, seemed almost threatening. On the last morning, he gave a demonstration lesson.

The lesson was with 9-10-year-old children. As a teacher in a secondary grammar school, I was not much concerned with - or interested in - children of that age. But the lesson was a revelation to me. The details are hazy now - the context was geometry. I think David asked the children to draw a cube, but I may be confusing this with an article he wrote for a later A.T.M. book, *Mathematical Reflections*. He then got the children to talk about what they had drawn, often encouraging them to come to the front and demonstrate at the blackboard.

There were two aspects of his way of working that were startling. Firstly, that he simply used the children's responses to elicit the ideas and gave no direct instruction at all. The richness of the ideas he revealed in the children's responses I found astounding. The second, equally new to me, was his way of stopping and working directly with individuals, rather than addressing the whole group, and expecting the rest to listen. It had never crossed my mind that these might be possible ways of working on mathematics in the classroom. It was even more surprising to me as his whole approach was so gentle, quite different from the acerbity I thought I had detected earlier. I went back to my classes after the Easter break inspired to attempt working in different ways.

I became eager to read what David wrote - it was often in short pieces: I recall some in the early issues of an occasional publication, the *A.T.M. Supplement* which he edited, and several in the pamphlets which A.T.M. produced at that time. It is hard now to think of how the world of